

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 2, line 16, with the following rewritten paragraph:

Non-Patent Document 2: B. Jalali et al., "Optical folding-flash analog-to-digital converter with analog encoding", Optical Optics Letters, Optical Society of America, Vol. 20, No. 18, September 15, 1995.

Please replace the paragraph at page 2, line 19, with the following rewritten paragraph:

Non-Patent Document 3: N. J. Doran et al., "Nonlinear-optical loop mirror", Optical Letters, Optical Society of America, Vol. 13, No. 1, January 1988.

Please replace the paragraph at page 2, line 22, with the following rewritten paragraph:

Non-Patent Document 4: Takashi Yamamoto et al., "Demultiplexing of ~~Sub-Tera-bit subterabit~~ TDM ~~optical-signal by using ultrafast~~ with a super-high-speed nonlinear optical loop mirror", Technical Report of the Institute of Electronics Information and Communication Engineers, C-I, issued from the Institute of Electronics Information and Communication Engineers, Vol. J82-C-1, pp. 109-116, March 1999.

Please replace the paragraph at page 2, line 28, with the following rewritten paragraph:

Non-Patent Document 5: Govind P. Agrawal, "NONLINEAR FIBER OPTICS", Academic Press, ISBN: 012045142533, 2nd3rd Edition, pp. 210-211, 1995January 15, 2001.

Please replace the paragraph at page 3, line 1, with the following rewritten paragraph:

Non-Patent Document 6: Stephen M. Jensen, "The Nonlinear Coherent Coupler", IEEE Journal of Quantum Electronics~~Electrics~~, Vol. QE-18, No. 10, October 1982.